GLASS MOSAIL OF BURMA WITH PHOTOGRAPHS

BY
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Under the Burmese Government the sumptuary laws were enforced against commoners not only in respect of dress, but in all the transactions of life, including even the words used in everyday speech. The honours thus accorded to the Royal family were shared by the community of monks, and as in many another country, the art handicrafts were matured in the Palace and the Monastery, where alone might the genius of the workman find unrestrained expression. The people, bound down as private persons, were, as patrons of the monks, able to indulge in the lavish display allowed to royalty alone, and while placing their earnings out of the reach of even official rapacity, were at the same time enabled to earn religious merit by obeying those precepts of the Lord Gaudama which inculcate the building of pagodas and monasteries, of shrines and of rest-houses in which to observe the eight-day fast.

And now the sumptuary laws have been swept away by the advent of the British, the old customs, strengthened by years of precedent, still hold sway, and with rare exceptions are observed by the people, who still refrain from using

the once forbidden forms and materials for their private gratification.

The national characteristics of the Burmese are well expressed in the construction and decoration of their religious buildings. A laughter-loving nation, impulsive with quick genius, yet reverent where reverence is due, they love flowing lines and ornament exuberant with vitality, but are careful to form the framework of their structures on principles handed down from one master to another with all the authority of the past. And it is well that this should be so, for the old proportions are pleasing to the eye, and whether it be boat or pagoda, cart or shrine, each part is well placed and fitted for the work it has to do. If Burmese ornament be contrasted with that of a kindred nation, the Chinese, its peculiarities are made clear. Chinese work is orderly and restrained; the ornament is used to emphasize the construction, and the subdivision of the main divisions is carefully marked and is in good proportion. With the Burmans there is no restraint, and, except in the oldest examples, there are no plain spaces to rest the eye and the brain, nor is the wealth of intricate detail rendered clearer by the recurrence of intertwined patterns. The ornamental parts are attached after the structure is complete, and hide rather than explain the construction.

The general effect produced by the best examples is of beautiful outlines and elegant exterior proportions; but

there enjoyment ceases; and the admiration at first excited is slowly changed to weariness at the disorganized jumble of items, each good in itself, but with no relation to its neighbour and but little to the work as a whole.

It is curious therefore to notice how these characteristics of Burmese art are modified and changed when the handicraftsman has to deal with mosaics in which spaces, lines and patterns cannot be ignored. It is not an art indigenous to Burma, but was introduced from Siam after an invasion of that country by Naungdawpaya, son of Alaungpaya, and to this day some of the best masters of the craft are Shans, whose colour sense is more highly developed than that of the Burmans, and who have some of the instinct for the division of spaces which characterizes the Chinese.

In Lower Burma it is on the platforms of the pagodas that the best examples of Burmese art are found, and chiefly on that of the Shwe Dagôn Pagoda at Rangoon, where pious Buddhists have for centuries lavished their riches. This, the most important shrine in Burma, is approached between two grim dragons and up many flights of covered steps, at each side of which are displayed on stalls, candles, paper praying flags, flowers, incense sticks, toys, masks, song-books, cheap jewellery, and many other things calculated to attract the attention of people from the jungles. The light, slanting between the pillars at the sides, reveals in softened hues the bright colours worn by the worshippers

who pass silently with bare feet up and down or pause at the stalls. When the topmost step has been reached, the last and most gorgeous flower-stall has been passed and the platform gained, the eye looks across the widened vista, but does not rest until it reaches the highest point of the tapering gilded mass which arises in seeming confusion from the platform below. After gazing awhile at the glittering *ti* fixed against the shifting clouds, the glance descends again towards the base and is attracted by candles in a dark shrine close at hand from the gloom of which twinkle stars of light, many coloured, and flickering as the flames waver in the wind. These are reflections caught from glass mosaics on pillar and altar, on the image and on its throne, on the ceiling and on the wall.

There are four principal shrines at the base of the pagoda, each facing a cardinal point and all decorated with glass mosaics. Those to the north and west are more elaborate than that opposite the south entrance, but before examining them it will be well to consider the group of pagodas and shrines found in the south-east corner of the platform which are represented in the first and second photographs. The mast with a fluttering peacock at its head carries streamers on which are written extracts from the Law of Buddha. The mast itself is encrusted for its whole length with mosaics in regular patterns, relieved here and there, but in unexpected places, with dividing rings. To

the right in the first photograph is a pagoda of singularly ungraceful shape, but the upper portion is covered with looking-glass mosaic which causes it to flash like dull silver against the palms behind. In front of this pagoda is a shrine which is best seen in the second photograph; it is made of masonry, and the whole of the front portion is glass mosaic set in cement.

Another example not far off is shown in the third photograph. An alabaster image is seen seated on a throne adorned with glass mosaic, while the background of the recess is of the same material. The whole of the front of the shrine is similarly ornamented. The upper portion of the exterior work consists of bold and effective scrolls placed on a bed of slips of narrow plain looking-glass. White glass is also the chief material used in the foliage work where there are occasional leaves of purple, of green and of a dull orange. The background of the pillars is in dark green on which are crimson stars and purple ornaments.

Passing along the platform, the main shrine at the base of the pagoda facing east next attracts attention. Taken as a whole, it is perhaps the most perfect example of Burmese art in the province. The many-roofed spire tapers above; each gable and pinnacle is in just proportion, the dark carving standing out against the roof and relieved by the red and gold of gable end and walling, while all is supported on massive

round posts, vermilion near the base and encrusted above with silvery glass mosaic. The fourth photograph shows the lower part of this shrine and a few Shans from the jungle. Glass mosaic is also used on the screens between the pillars, which are singularly effective.

The shrine facing the north has been pulled down and a new one is being built. In the pillars the ground colour is dull green, while the stems of the tendrils are white and the leaves in purple and orange; the whole interlaced with a purple geometrical pattern, while a gilded line outlines each colour. The next photograph shows the shrine finished. Inside, next to the pagoda, is a recess of very old date in which is a figure of Gaudama thickly encrusted with gold-leaf and before which candles are burning. Along a wall which is further forward than the recess, but railed off, a number of images are placed, some of brass and some of marble, and many clothed with a robe of yellow gauze. On the top of the rail is another row of candles and these can be seen in the photograph. Before these are flowers in jars—amherstia, frangipani and cannæ; worshippers seated with upraised closed hands mutter fragments of the law in Pali. The pillars are all covered with mosaic above and gilded below, the work intertwining in three planes. The colours of the outer pillars have been described before; the inner have a ground-work of blue and the pattern, in a conventional scroll, almost geometrical, is in green with

a few buds of glass diamonds surrounding a ruby. The narrow strips outlining each colour are gilded. Above all is the ceiling, which follows the slopes of the roof except in the centre. It is in large panels of looking-glass arranged in star-like facets, divided into concentric squares or ovals by a border of bluish-purple flower scroll work, the edges of which are lined with gold. These ceilings are broad in effect, being of many different slopes; the light on the glass is not uniform but varying, gleaming here and there; but from the darker portions points of flashing light appear. The gilded portions, too, appear sometimes brown, sometimes gold in colour. In the centre the ceiling is more elaborate and is shown in photograph No. 6.

The star-shaped facet-work generally used for ceilings is shown in photograph No. 7. It has been employed here to cover the back wall of a shrine, and on it has been imposed the figure of a *galon* or winged-man, holding a writhing chain of *nagas*. From this photograph a faint idea may be gained of the effect of using glass mosaics on the frontlet and embroidered edges of the robe of a figure. Although the artist has not quite succeeded, there is much in this work which appeals to the imagination. The contrast between the placid image and the horrid snakes is heightened by the smoothness of the alabaster against the rough glass background and by the pure dead white of the image against the gleaming facet-work in which is reflected

the trees outside and red and green light cast through a coloured window over a doorway facing the image.

Continuing round the platform from the north shrine to the westward, an old giant *padauk* tree is seen, and around its trunk are masonry recesses, recalling those on the face of the cliffs at Ywataung, in which sit images of Gaudama placed there by devotees long since dead. In front and blocking them from view, save where the spires taper away, are modern shrines of brick, some in the conical Burmese shape and some in the square style of the Shans. Photograph No. 8 shows one corner of the group. The chief effect is that of gold picked out with vermilion, though in some the vermilion predominates, but in all the lower portions are elaborately decorated in glass mosaics. Behind the barred doorways the alabaster images sit on the usual glass throne, and behind, through the gloom, glimmering points of light suggest a glass background. It is curious to notice that, though the buildings are in shadow, the white jackets and coloured silks of the passers by are reflected in waves of light, giving to the immoveable buildings the appearance of movement and bringing to mind the rythmic play of light on a diamond necklace. Photographs Nos. 9 and 10 show some of these shrines in greater detail with the monsters that guard the doors.

Some good examples of old mosaic work are shown in the next two photographs, Nos. 11 and 12. The altars or

thrones seen in the former are simply effective in design and compare well with the unmeaning design shown in photograph No. 9, and is preferable to that of No. 7. There is less handwork and more headwork in the old design, and the result is much more satisfactory as a work of art. To the left of photograph No. 11 is a stand for an impression of the footprint of Gaudama Buddha, wherein the symbols of all his previous existences are depicted. This, too, is an excellently quiet and appropriate piece of work.

The box surmounted by a small shrine shown in photograph No. 12 is one of those used to keep manuscripts in and came from a monastery in Upper Burma. The colours employed are dull green and lead colour, relieved here and there with a sober red.

The last photograph is of a shrine, not quite finished, on the western face.

Material used in Glass Mosaic Work.

Glass.—(*a*) *Backed with quick-silver.* Glass plates of different colours are well cleaned and dried. Mercury is poured over a foil of an alloy of tin and lead and the foil placed at the back of the glass, and, after being sprinkled with fine ash, is squeezed with a cloth roller until it is perfectly even and smooth. The foil is removed from the

glass, which is kept flat for a day and upright for another day. A thin piece of paper is then pasted over the coating and the glass is ready for use. It is cut into the required shapes with a glazier's diamond.

(*b*) Very thin glass is treated in the same way and is cut into small squares with a diamond; the corners of the squares are snipped off with scissors; the edges are left jagged unless required for fine work, when they are bevilled off on a stone-cutter's wheel. These small octagons are used in bordering and in making patterns.

(*c*) Glass with a tin-foil back.

(*d*) Imitation diamonds.

Varnishes and Resins.

(*a*) *Thit-si.*—The best is obtained from the Shan States and costs Rs. 2-8-0 a viss.

(*b*) *A-young-tin Thit-si.*—The common quality made in Burma.

(*c*) *Shan-si.*—An oil extracted in the Shan States from sesamum.

Sundries.

(*a*) Vermilion.—The Chinese kind.

(*b*) Ashes of cow-dung and bones, finely sifted.

(*c*) Saw-dust.

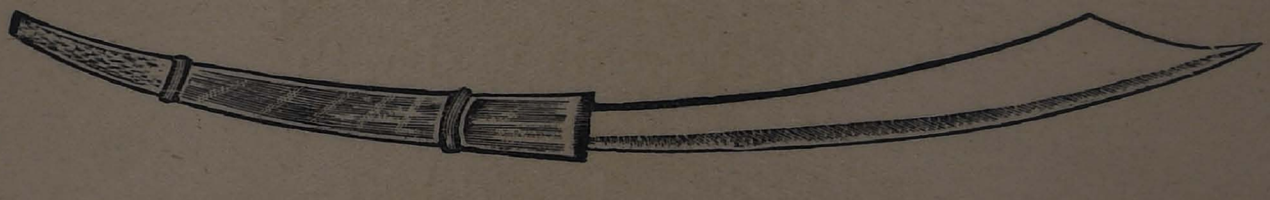
(*d*) Paste made of glutinous rice.

Preliminary Preparations.

Putties.—(*a*) The putty used in coarse work is made of saw-dust mixed with *thit-si* and well pounded in a mortar.

(*b*) Putty used in finer work is made by boiling *thit-si* and stirring it until it gives out a slight crackling sound, when it is sprinkled with water and allowed to cool. It is then thoroughly mixed with cow-dung ash and beaten on a block of wood with a stick, ashes being added until the right consistency is obtained. It must be used when fresh and before it hardens.

This putty is formed into a long string about one-tenth of an inch in diameter and is slightly powdered with fine ash. Ornaments are made of it which are afterwards applied to the work with resinous glue (*thit-si*), or the putty is applied to the face of the work and patterns formed partly by the manner in which it is laid on and partly by being moulded with a knife.



When ornaments are made in the workshops, the design is first engraved on slate over which fine ash has been sprinkled, and the ornament is moulded to the pattern and taken off to set.

Processes.

Preparation of the surface.—Glass mosaic is generally affixed to the plaster of masonry. Coarse saw-dust putty is laid on the plaster until an even surface is obtained, when it is coated with *thit-si* and allowed to dry. The surface is then rubbed down with a smooth stone.

Drawing the pattern.—A card-board stencil is prepared in the workshop, and all the different coloured glasses are cut to shape there. The pattern is then marked on the prepared surface with powdered chalk.

Fixing the glass.—The glass, ready cut, is placed in a bamboo tray, and the workman picks them out, and putting some saw-dust putty on the back presses the glass with his thumb into the required position; he is shown doing this in photograph No. 5. He does this with one colour at a time until the pattern is complete. Cords of putty are now placed between each piece of glass and they are carefully cut and moulded with the knife so that the finished pattern may be accurate and in flowing lines. The whole work is then coated with *thit-si*, which is allowed to dry. The parts which are to be gilded, that is, the tracery of dividing lines, is not painted with a coating of vermilion and Shan *thit-si*. When this is dry the glass surfaces are cleaned and the parts to be gilded are again painted with a very thin layer of *thit-si* and gold-leaf is applied.

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PHOTOGRAPH No. 1.—GROUP OF PAGODAS AND SHRINES IN THE SOUTH-EAST CORNER OF PLATFORM.

PHOTOGRAPH No. 2—ENLARGED VIEW OF SHRINE IN SOUTH-EAST CORNER,

PHOTOGRAPH No. 3.—SHRINE IN SOUTH-EAST CORNER.

PHOTOGRAPH No. 4.—BASE OF MAIN SHRINE FACING THE EAST.

PHOTOGRAPH No. 5.—MAIN SHRINE FACING THE NORTH—FINISHED.

PHOTOGRAPH No. 6.—CENTRAL PORTION OF CEILING OF NORTHERN SHRINE.

PHOTOGRAPH No. 7.—DETACHED SHRINE IN NORTH-EAST CORNER.

PHOTOGRAPH No. 8.—GROUP OF PAGODAS AT THE BASE OF OLD TREE.

PHOTOGRAPH No. 9.—LOWER PORTION OF A DETACHED SHRINE.

PHOTOGRAPH No. 10.—DETAILS OF SHRINE SHOWN IN No. 8.

PHOTOGRAPH No. 11.—OLD ALTARS.

PHOTOGRAPH No. 12.—OLD BOX FOR HOLDING MANUSCRIPTS.

PHOTOGRAPH No. 13.—SHRINE ON WESTERN FACE.

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